

NAVSEA  
STANDARD ITEM

FY-12

ITEM NO: 009-107  
DATE: 30 JUL 2010  
CATEGORY: II

1. SCOPE:

1.1 Title: Piping System Cleanliness (Non-Nuclear); accomplish

2. REFERENCES:

2.1 Standard Items

2.2 S9AAO-AB-GOS-010, General Specifications for Overhaul of Surface Ships (GSO)

2.3 0902-018-2010, General Specifications for Deep Diving SSBN/SSN Submarines

2.4 S9086-RK-STM-010/CH-505, Piping Systems

2.5 MIL-STD-1330, Precision Cleaning and Testing of Shipboard Oxygen, Helium, Helium-Oxygen, and Nitrogen Systems

2.6 MIL-STD-419, Cleaning and Protecting Piping, Tubing, and Fittings for Hydraulic Power Transmission Equipment

2.7 MIL-STD-1622, Cleaning of Shipboard Compressed Air Systems

2.8 S9086-RW-STM-010/CH-516, Refrigeration Systems

3. REQUIREMENTS:

3.1 Accomplish the general cleaning requirements of 2.2 through 2.4 for new, modified, or repaired non-nuclear piping systems and components of nuclear and non-nuclear powered naval vessels. Accomplish the system cleaning requirements of 2.5 through 2.8.

3.1.1 Clean to the following acceptance standard:

3.1.1.1 Cleanliness Level II: Surface shall be visually free of grease, oil, flux, scale, dirt, loose particles and any other contamination foreign to the base metal. Tap water residues on all metals and light superficial rust on carbon steel surfaces, caused by short time exposure to the atmosphere, are permitted. Light dust on cleaned surfaces is not objectionable, provided that the quantity and size of the particle does not adversely affect system operations.

3.1.1.2 Cleanliness Level III: Surface shall be reasonably free of contamination and any remaining residue on the surface does not interfere with system operations or damage system components.

3.2 Accomplish local cleaning to areas where existing system cleanliness has been lost in a localized area (such as metal shavings deposited in a pipeline while removing a section for replacement). Restore cleanliness by locally swabbing, wiping, vacuuming, etc., the area to meet the acceptance criteria.

3.3 Accomplish cleaning, flushing, and acceptance criteria of compressed air systems in accordance with Section 551 of 2.2 and 2.7.

3.4 Accomplish cleaning, flushing, and acceptance criteria of oxygen, nitrogen, and helium systems in accordance with Section 552 of 2.2 and 2.5.

3.5 Accomplish cleaning, flushing, and acceptance criteria of hydraulics in accordance with Section 556 of 2.2 and 2.6.

3.6 Accomplish cleaning, flushing, and acceptance criteria of fuel oil systems in accordance with Section 541 of 2.2.

3.7 Accomplish cleaning, flushing, and acceptance criteria of steam systems in accordance with Section 253 of 2.2.

3.8 Accomplish cleaning, flushing, and acceptance criteria of condensate systems in accordance with Section 255 of 2.2.

3.9 Accomplish cleaning, flushing, and acceptance criteria of lube oil systems in accordance with Section 262 of 2.2.

3.10 Accomplish cleaning, flushing, and acceptance criteria of fresh and potable water systems in accordance with Section 532 of 2.2.

3.11 Accomplish the requirements of 009-09 of 2.1 for each cleaning operation of refrigerant systems. The PCP shall incorporate the requirements of 2.8.

3.12 Accomplish cleaning, flushing, and acceptance criteria of HP/LP steam drains in accordance with Section 534 of 2.2.

#### 4. NOTES:

4.1 This Standard Item does not apply to systems of nuclear-powered ships covered by NAVSEAINST 9210.36, Steam Plant Cleanliness Control, or nuclear piping systems on nuclear-powered ships.